Indirect network externality (INE) effect exists when the utility of a product increases with the greater availability of compatible complementary products. We demonstrate that INE effects can vary by product attributes, with externality-sensitive attributes gaining more from increased availability of complementary products than other attributes. Past research has assumed that the benefit of increased availability of complementary products (e.g., software) accrues to the entire product (e.g., hardware). Utilizing data covering a period from 1985 to 1995 on compact disc player prices, attributes, and CD titles releases, and using a hedonic price approach, we find significant positive interactions between CD title availability and two attributes of the CD player, namely, changer capacity and its oversampling rate. In addition to INE-attribute interactions, increased availability of CD titles is found to have a significant positive impact on the overall price of CD players, which is consistent with past research. Collectively, these effects of INE have helped reduce the yearly decline in the price of CD players. The finding that INE effects differentially affect different attributes can help managers in decisions such as pricing, timing of introduction, and changing the levels of INE-sensitive attributes.

(Indirect Network Externality; Hedonic Price; Externality Sensitive Attributes; CD Player Prices)